

REMARKS

Applicant has carefully studied the outstanding Office Action. The present response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

1. Claims

Applicant has amended claims independent claims 1, 11, and 35, as well as dependent claims 4-6, 12-13, 16, 18, 23, 25, 37 and 38. Pending in this application are claims 1-42.

2. Response to Anticipation Rejection

The Examiner has rejected previously pending claims 1-5, 11-15, 21-22, 28-33 35-37 and 42 under 35 U.S.C. § 102 as being anticipated by Stead (U.S. Patent Pub. No. 2002/151313 A1); claims 6, 8, 9, 15, 18, 23 and 25 as obvious over Stead in light of LeBlanc (U.S. Patent No. 5,508,707); and claim 34 as obvious over Stead in light of Jacobson (U.S. Patent No. 6,466,796). Applicants respectfully traverse this rejection.

As amended, the invention recited by claims 1-42 is directed to a method and system for communicating a geographic location of a given sector in a cellular wireless system, *inter alia*, by determining a “polygon of influence” of a designated origin of the given sector with respect to a designated origin of at least one other sector. A “polygon of influence,” as defined in the specification, is a polygon in which substantially all points are closer to the origin of the sector than to the origins of any adjacent sector. *See* Summary, p. 4, and Detailed Description of Exemplary Embodiment, p. 6.

Applicants submit that the definition of a polygon of influence is subsumed in the definition of a “PI-based location” as “a polygon-of-influence based location” or, in other words,

a “location that is based on a polygon of influence for that sector taken with respect to one or more other sectors.” *See* Detailed Description of Exemplary Embodiment, p. 6. Nevertheless, Applicants have made this definition explicit by amending the independent claims to recite that the PI-based location is established “by a process comprising determining a polygon of influence of the given sector with respect to at least one other sector.” Applicants have also amended the dependent claims designated above as the polygon of influence recited in those claims now has explicit antecedent basis.

None of the cited art uses such a polygon of influence as defined in the specification to determine a geographical location or PI-based location. Stead, for example, teaches the use of RF measurements, including received signal strength and a location (latitude, longitude, in degrees) that are then manipulated using a “shape algorithm” to obtain the resulting polygon. *See* p. 3, paragraph 39 – p. 4, paragraph 43. This is not a polygon of influence, as the signal strength does not necessarily depend on how close the point is to one sector versus another, but can depend upon geographical features or other RF obstacles as well.

LeBlanc similarly defines a polygon not by how close a point is to one sector versus another, but by “initial modeling of determined RF measurements.” LeBlanc, col. 14, lines 40-45. This RF measurement information is then plotted and then used, with data regarding the base stations that may be “heard” by the mobile unit, to determine where “the corresponding contours of neighbor base stations intersect so as to define a first bounding polygon area . . .” *Id.* at col. 14, lines 48-53. Thus, the polygon of LeBlanc, like the polygon of Stead, is not a polygon of influence as defined in the specification and required by the claims.

Furthermore, neither Jacobsen (U.S. Patent No. 6,466,796) or Nowak (Pub. No. 2002/0193121 A1), teach or suggest the use of a polygon of influence as claimed.

As such, neither Stead, LeBlanc, Jacobson nor Nowak, alone or together teach or render obvious the claimed methods. Therefore, Applicants submit that claims 1-42 are patentably distinct over the cited art. Applicants respectively submit that each of the pending claims is allowable and therefore respectfully requests favorable reconsideration.

Respectfully submitted,

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